

# resoltech 2010 FR ECO

Hardener 2014 FR

# Biobased auto extinguishing epoxy topcoat









- Complies with IMO Solas Part 5 Annex 1
   For bulkheads, walls & ceilings linings, floor covering,
   and primary deck covering
- 17% of biobased carbon on the resin part\*
- Application by brush or roller
- Non-sagging on vertical surfaces

<sup>\*</sup>ratio of the number of biobased carbon atoms / the number of total carbon atoms

### INTRODUCTION

RESOLTECH 2010 FR ECO/2014 FR is a fire retardent epoxy system that **complies with EN 45545-2 standard**.

With 17% of biobased carbons on the resin part, the use of 2010 FR ECO/2014 FR system will reduce the carbon footprint of the final parts.

One coat of 300 to 500  $\mu m$  applied by brush or roller is recomended in order to obtain the self-extinguishing properties.

After a proper surface preparation, RESOLTECH 2010 FR ECO/2014 FR may be applied on on **many susbtrates** (steel, aluminium or composite...).

### **MIXING RATIO**

The mixing ratio must be accurately followed. It is not possible to change the ratio, it would result in lower mechanical properties.

The mixture should be thoroughly stirred to ensure full homogeneity.

System	2010 FR ECO/2014 FR	
Mixing ratio by weight	100/11	

### **APPLICATION**

- It is recommended to use the products at temperatures above 10°C in order to facilitate the mixing of the two parts.
- Application by brush, roller or casting.
- Coverage recommended: 300 to 500µm
- Consumption: 450 to 750 g/m<sup>2</sup>

### BIOBASED CARBON CONTENT

Reference or mix	2010 FR ECO	2010 FR ECO 2014 FR
Biobased carbon mass content*	17%	13%

stratio of the number of biobased carbon atoms / the number of total carbon atoms

### PHYSICAL CHARACTERISTICS

1 Visual aspect

2010 FR ECO: 2014 FR: MIX:

White paste Clear liquid White filled liquid

2 Density

References	2010 FR ECO	2014 FR	
Density at 23°C	1.58	0.99	
Mix density à 23°C	1	1.52	

ISO 1675, ± 0.05 tolerance

## 3 Viscosity

References	2010 FR ECO	2014 FR
Viscosity at 23°C (mPa.s)	81 500	70
Mixed viscosity at 23°C (mPa.s)	-	28 480

Measured on rheometer, 20s-1, 2 min, gap 1mm

### **REACTIVITIES**

System	2010 FR ECO/2014 FR	
Gel time on 70mL at 23°C (4cm high mix)	2h42min	
Time at exothermic peak on 70 mL at 23°C	NA	
Temperature at exothermic peak on 70mL at 23°C	NA	

Reactivity measurements realized on Trombotech® NA: not applicable

### **CURING AND POST-CURING**

In order to obtain the maximum thermo-mechanical properties, it is necessary to respect the recommended curing cycle. The table below shows the glass transition temperatures (DSC) according to different curing cycles.

Curing cycle	2010 FR ECO/2014 FR	
16h à 60°C	T <sub>e</sub>	69°C
	Shore D Hardness	89

T<sub>G</sub>: DSC measurements, 10°C/min, inflexion point Hardness: ISO 868

### **PACKAGING**

#### 2010 FR ECO + 2014 FR:

- Box of 1Kg + 0.11Kg
- Bucket of 5Kg + 0.55Kg
- Bucket of 25Kg + 2.75Kg
- Drums kit of 200Kg + 22Kg

### TRANSPORT & STORAGE

Keep containers sealed and away from heat and cold preferably between 10°C and 30°C in a well ventilated area. Our products are guaranteed in their original packaging (check expiry date on the label).

### **HEALTH & SAFETY**

Skin contact must be avoided by wearing protective nitrile gloves & overalls or other protective clothing. Eye protection should be worn to avoid risk of resin, hardener, solvent or dust entering the eyes. If this occurs flush the eye with water for 15 minutes, holding the eyelid open, and seek medical attention. Ensure adequate ventilation in work areas. Respiratory protection should be worn with ABEKP coded filters. Resoltech issues full Material Safety Data Sheet for all hazardous products. Please ensure that you have the correct MSDS to hand for the materials you are using before commencing work.

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The data provided in this document is the result of tests and is believed to be accurate. We do not accept any responsibility over the mishandling of these products and our liability is limited strictly to the value of the products we manufacture and supply.



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